

### REMARKS

Claims 1, 2, 4, 6 to 9, 12 to 17, 19 to 24, 26 to 33, 35 to 39, 41 to 59, 61 to 64, 68, 70 to 73, 75 to 80, 82, 84 to 88, and 90, as amended, appear in this application for the Examiner's review and consideration. The amendments are fully supported by the specification and claims as originally filed. Therefore there is no issue of new matter.

Claims 24 and 26 to 32 were rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement for the reasons set forth on page 3 of the Office Action.

In response, Applicants submit that the third line from the end of claim 24 has been amended to delete  $C\equiv CR$  as a substituent for the aryl and heteroaryl groups recited in that claim.

Therefore, the present claims comply with the written description requirement. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claims 24 and 26 to 32 under 35 U.S.C. § 112, first paragraph.

Claims 1, 2, 4, 6 to 9, 12 to 17, 19 to 24, 26 to 33, 35 to 39, 41 to 59, 61 to 64, 68, 75 to 80, 82, 84 to 88, and 90 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for the reasons set forth on pages 3 and 4 of the Office Action.

In response, Applicants submit that claim 1, which recites that  $R_3$  is a substituent having a Hammett value greater than 0.6, has been amended to recite that each of  $R_2$ ,  $R_4$ ,  $R_5$ , and  $R'_3$  through  $R'_6$  are independently selected from the group of substituents recited in that claim.

With regard to claims 16, 33, 47, 64, 68, and 88, those claims have been amended to recite "wherein at least one of  $R_3$  and  $R_5$  is CN" as a proviso.

With regard to claims 24 and 59, those claims, which recite that at least one of  $R_3$  and  $R_5$  is CN, have been amended to recite that each of  $R_2$ ,  $R_4$ , and  $R'_3$  through  $R'_6$  are independently selected from the first group of substituents recited in those claims.

With regard to the recitation of a Hammett value greater than about 0.6, claim 1 has been amended to recite that  $R_3$  is a substituent having a Hammett value greater than 0.6.

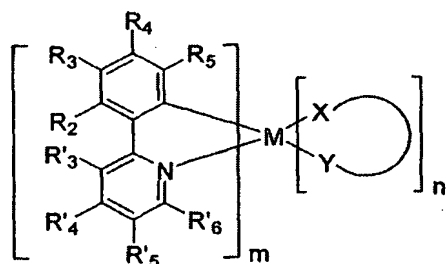
With regard to the recitation of  $C_nF_{2n+1}$  in claim 24, that claim has been amended to change " $C_nF_{2n+1}$ " to --perfluoroalkyl--.

With regard to the dependencies of claims 26 and 61 to 63, those claims have been amended to correct the dependencies.

Therefore, the claims particularly point out and distinctly claim the subject matter Applicants regard as the invention. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claims 1, 2, 4, 6 to 9, 12 to 17, 19 to 24, 26 to 33, 35 to 39, 41 to 59, 61 to 64, 68, 75 to 80, 82, 84 to 88, and 90 under 35 U.S.C. § 112, second paragraph.

Claims 1, 2, 4, 8, 12, 13, and 15 were rejected under U.S.C. § 102(e), as allegedly being anticipated by U.S. Patent Application Publication No. 2003/0108771 to Lecloux et al. (“Lecloux”) for the reasons set forth on page 5 of the Office Action; and claims 1, 2, 4, 6, 8, and 12 to 15 were rejected under U.S.C. § 102(e), as allegedly being anticipated by U.S. Patent Application Publication No. 2003/0059646 to Kamatani et al. (Kamatani”) for the reasons set forth on pages 5 and 6 of the Office Action.

In response, Applicants submit that the presently claimed invention is directed to emissive materials represented by the structure



where  $R_3$  is a substituent having a Hammett value of at least 0.6.

In contrast to the presently claimed invention, Lecloux discloses electroluminescent platinum compounds and devices made with such compounds in which substituent  $R^5$ , which is in a position generally equivalent to that of  $R_3$  of the presently claimed emissive material, is selected from the group consisting of H, D,  $C_n(H+F)_{2n+1}$ , F,  $OC_n(H+F)_{2n+1}$ ,  $OCF_2Y$ ,  $SR^3$ , and  $N(R^3)$ , or can join with adjacent R groups to form a 5- or 6-membered ring, where Y is H, Cl, or Br, and  $R^3$  is H or  $C_nH_{2n+1}$ . Lecloux does not disclose that the disclosed substituent  $R^5$  can be CN, or that it can have a Hammett value of at least 0.6. Moreover, Lecloux does not disclose any substituent having a Hammett Value greater than 0.6, such as CN, which has a Hammett Value of 0.67. Therefore, Lecloux does not disclose the presently claimed invention.

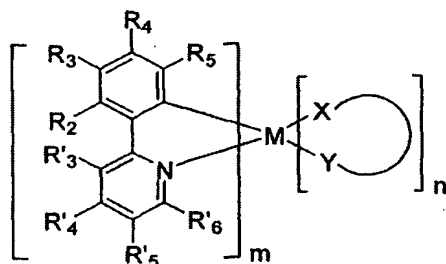
Similarly, Kamatani discloses luminescence devices and display apparatus incorporating an organic film. The disclosed organic films contain metal complexes having ligands substituted with F and alkyl substituents that are substituted and unsubstituted. Kamatani does not disclose or suggest any composition having a substituent having a

Hammett Value greater than 0.6 in a position generally equivalent to the R<sub>3</sub> position of the presently claimed compositions. Moreover, all of the substituents disclosed by Kamatani have Hammett Values significantly less than the presently claimed value of 0.6.

Therefore, as Lecloux and Kamatani do not disclose the presently claimed invention, and Grushin do not disclose the presently claimed invention, the claims are not anticipated. Accordingly, it is respectfully requested that the Examiner withdraw the rejections of the claims under 35 U.S.C. §102(e) and 35 U.S.C. §103(a).

Claims 1, 2, 4, 6 to 8, 13, and 14 were rejected under 35 U.S.C. §103(a), as allegedly being unpatentable over U.S. Patent Application Publication No. 2002/0121638 to Grushin et al. (Grushin") for the reasons set forth on pages 6 and 7 of the Office Action.

In response, Applicants submit that the presently claimed invention is directed to emissive materials represented by the structure



where R<sub>3</sub> is a substituent having a Hammett value of at least 0.6.

In contrast to the presently claimed invention, Grushin discloses electroluminescent iridium compounds substituted with fluorinated phenylpyridines, phenylpyrimidines, and phenylquinolines and devices made with such compounds. None of the compounds disclosed by Grushin are substituted with a substituent having a Hammett Value of more than about 0.6 in a position generally equivalent to R<sub>3</sub> of the presently claimed compounds, and none of the disclosed compounds has a substituent having a Hammett Value of more than 0.6, as presently claimed.

Therefore, as Grushin does not disclose or suggest the presently claimed invention, the claims are not obvious. Accordingly, it is respectfully requested that the Examiner withdraw the rejection of the claims under 35 U.S.C. §103(a).

Claims 1, 4, 6 to 8, 12 to 17, 19, 21 to 24, 26 to 33, 35 to 39, 41 to 59, 61 to 64, 68, 70 to 73, 76 to 80, 82, 84 to 88, and 90 were provisionally rejected under the doctrine of obviousness-type double patenting as being allegedly unpatentable over claims 1 to 7, 9, 13 to 20, 23, 24, 26, 29, 33, 37, 40, 41, 43 and 46 of co-pending application no. 10/288,785 for the reasons set forth on page 7 of the Office Action.

In response, Applicants submit that a Terminal Disclaimer will be timely filed upon receipt of an indication of allowable subject matter in the present claims.

With regard to claims 37 and 38, Applicants submit that claim 37 has been amended to depend from claim 36.

Applicants thus submit that the entire application is now in condition for allowance, an early notice of which would be appreciated. Should the Examiner not agree with Applicants' position, a personal or telephonic interview is respectfully requested to discuss any remaining issues prior to the issuance of a further Office Action, and to expedite the allowance of the application.

No fee is believed to be due for the filing of this Amendment. Should any fees be due, however, please charge such fees to Deposit Account No. 11-0600.

Respectfully submitted,

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Dated: May 16, 2005

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